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Addressees:

SAMPLING AND ANALYSIS PLAN (SAP) FOR RELEASE OF THE 105-C BELOW-GRADE STRUCTURES AND UNDERLYING SOILS, DOE/RL-97-37, REV. 0

Addressees:

Please find attached the subject document for review and comment. This document has been revised to incorporate comments made by the U.S. Department of Energy, Richland Operations Office, the regulators, and the Environmental Restoration Contractor on the Draft B version of this document.

The significant aspects of the SAP include the following:

- Sampling of the soil underlying the fuel storage basin (FSB) is included in the scope to determine the contamination status of the underlying soils, and as the first step in a graded approach, to validate and as necessary refine the assumptions in the Residual Radioactivity (RESRAD) vadose zone model.

- Shallow and deep zone distinctions have been applied to both structures (real property) and soil. Three alternatives are considered for disposition of the FSB including:

    - Demolish and dispose of the FSB.

- Decontaminate and/or demolish all or part of the FSB walls to the 15 foot elevation below grade. Remove the concrete rubble and dispose of it at the Environmental Restoration Disposal Facility.

- Decontaminate the inside surface of the FSB for release of standing below-grade structure.

- The applicable or relevant and appropriate requirements are consistent with the 100 Area Record of Decision (15 mrem yr above background and Model Toxics Control Act for residual contamination levels in structures and soils).

- Two residential scenarios developed by the Free Release Working Group have been applied for evaluation of release of real properties and remediated waste sites.

  - A distinction is made between "Real Property" and "Non-Real Property."

  - Radioactive decay has been incorporated into the RESRAD-BUILD analysis, taking credit for the 40 year Interim Safe Storage period that the FSB is retained within the shadow of the reactor pile. No decay period has been applied to the RESRAD (Soil) analytical model, as the migration of contaminants through the vadose zone are not affected by the safe storage period.

If you have any question, please feel free to contact me at 376-7121.

Sincerely,

J. M. Bruggeman, Project Manager
Decontamination and Decommissioning Project

DDP:GR

Attachment

cc w/attach:
M. A. Mihalic, BHI